

## REMARKS

This paper responds to the Office Action dated March 15, 2004.

**Claim objections.** At paragraph 1, page 2, the Examiner suggests changes to the claims. The suggested changes have been made.

**Claim rejections.** The Examiner has rejected all claims as supposedly rendered obvious over a two-way combination of a US Pat. No. 5,581,753 to Terry et al. ("Terry") and a US Pat. No. 6,557,111 to Theimer et al. ("Theimer").

Regarding the field of the invention, Terry does not refer to a message system at all.

The present invention claims a message system (and method etc.), as explained in the description, page 1, lines 7-9:

MOM enables multiple computer programs to exchange discrete messages with each other over a communications network.

A message is characterized by having a sender and one or more recipients.

This is now made more explicit in claim 1 by incorporating the feature of:

message data comprising a destination information addressing a destination

This feature is already present in the independent claims 7, 13, 17.

Terry is related to a different field of technology, namely to distributed databases. A client is connected to a database and performs a sequence of read/write operations on the database. The subject of the Terry patent is to keep this database consistent with replica databases, so that the client shall find the same data when connecting to a replica at a later time (col. 2, lines 10-25).

There is no reference made to the sending of messages to another client, and no messages are being addressed to another client.

The same holds for the Theimer patent, which is directed towards a specific update mechanism linking said replicated databases.

Furthermore, even if Terry did refer to a message system explicitly, the combination with Theimer would not lead to the claimed invention: Theimer teaches improving the update mechanism between replicated databases. For this purpose, a combination of a multicast system and an epidemic-style communication system is described:

According to Theimer, only the database servers 52a-52n are equipped with multicast update communication facilities 62a-62n (see Figure 4 and col. 10, lines 1-10). Updates using the multicast approach take place only between the database servers 52a-52n (see Figures 5 and 6, col. 10 line 65 to col. 11 line 15).

Thus, the multicast communication system does not involve the clients.

Now even if the client managers of the present invention could be equated with Terry's session managers, and the message managers of the present invention could be equated with Terry's (database) servers, then Theimer would simply teach to arrange a multicast communication system linking the (database) servers/message managers alone.

This would perhaps improve communication between the (database) servers, but would not change the communication between the servers/message managers and the session managers/client managers at all.

The present invention differs from this combination in that it arranges the multicast system *between the message managers and the client managers*. This is structurally different and

nowhere suggested in either Terry or Theimer.

Furthermore, Theimer teaches away from the use of a multicast system, since it is stated at col. 2, lines 35-39:

To implement weakly consistent designs, systems and algorithms which offer a quick propagation of changes have been developed. However, these quick propagation designs such as multicasting, provide low levels of tolerances and have a "best efforts" standard of reliability.

It is also stated at col. 7, lines 35-40:

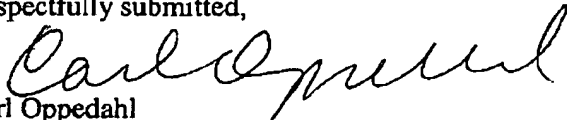
Multicasting is not connection-oriented. A multicast datagram is delivered to destination group members on a "best-effort" standard of reliability. This means that a multicast datagram is not guaranteed to reach all members of a group, neither are packets guaranteed to arrive in the order in which they were transmitted.

This means that multicast systems are sufficient for the synchronization of weakly linked databases, for which some inconsistency is tolerated.

However, in a messaging system, where a message is explicitly addressed to one or more recipients, loss of messages is not to be tolerated. Therefore, in view of the above teaching by Theimer, one would have refrained from applying a multicast system as the central element of a message system.

By reason of all the foregoing, it is requested that the rejection be reconsidered.

Respectfully submitted,



Carl Oppedahl  
PTO Reg. No. 32,746  
Oppedahl & Larson LLP  
P O Box 5068  
Dillon, CO 80435-5068  
telephone 970 468 6600